

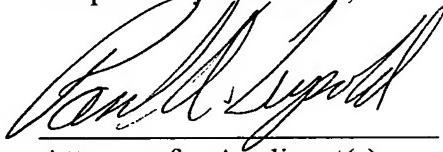
stable colloidal suspension of the pigment in the liquid vehicle and to prevent clogging of the ink channels and nozzles. The Examiner indicates that the composition as taught by Yu et al. appears to anticipate the claimed invention when filterability is measured by the same standards. The Examiner states that the composition of Yu et al. would inherently exhibit the claimed properties in absence of evidence to the contrary. The Examiner states that because Yu et al. teaches the same particle sizes that the ink will pass the test of claim 1. This rejection is respectfully traversed.

Although Yu et al. discloses inkjet ink similar to the present invention Yu et al. fails to teach all the limitations of the claimed invention. In column 4, lines 37-39 of Yu et al. it is stated that the dispersion completely filters through a 1 to 2 micron nylon absolute filter. In column 3, lines 19-21 of Yu et al. it is indicated that the material has 10% solids of the colored pigment and passes through a 3.0 micron nylon absolute filter. In contrast, the material of the instant invention after four passes of the ink through a 1.0 micron filter still has 80 percent filterability. This is a much more rigorous test than that disclosed in Yu et al. In column 4, lines 16-24 of Yu et al. the range of particles in the ink is from 10 to 300 nm. However, those skilled in the art understand that there are almost always particles present in the ink outside this range. In fact the data disclosed in column 26, table 4 of Yu et al. clearly shows that pigments 5.1-5.3 contain a substantial number of particles greater than 0.5 and 1.0 microns, this is outside the range of 10 to 300 nm. Furthermore, because all of the examples disclosed in Yu et al. were generated by similar means all of the pigments would have similar oversize particle counts. One skilled in the art would understand that the majority of particles are within the range of 10 to 300 nm. However, the presence of the relatively larger particles can be problematic when firing inks from a small diameter nozzle in an inkjet head, and can contribute to plugging filters. This affects the reliability of the printing. The present invention is useful for jetting ink for multiple hours and printing hundreds of pages without failure. Yu et al. discloses printing on paper however, fails to mention printing multiple sheets, especially the number of sheets as disclosed by the present application's examples. The requirement for the inks taught by Yu et al. is that they pass through a 3.0 micron absolute filter. The 3.0 micron filters are sufficiently large enough to allow 1.0 and 0.5 micron particles to pass through the filter without

plugging. The Applicants kindly direct the Examiner's attention to the comparative inks of the instant application, CC-2 through CC-4, CY-2 through CY-4, CM-1 through CM-3 and CK-1. Each of these inks have been filtered through a 1.0 micron filter and then degassed and filtered through a 1.2 micron filter. This ink treatment is at least as effective as the single 3.0 micron filtration step disclosed by Yu et al. to remove particles in the 1.0 micron range. However, these inks fail the filtration and jetting test as shown on pages 33-34, table 1 of the present application. These examples provide evidence that the inks disclosed by Yu et al. are not inherently the same as the instant invention. The inks of the instant invention that meet the measurements of claim 1 are unexpected in performance as shown by the examples. The inks disclosed in column 26, table 4 of Yu et al. have at least 7,700,000 particles greater than 1.0 micron per ml of ink. The filtration test of the instant invention stats that 100 ml of ink was passed through a 1.0 micron filter. There would be a tremendous number of particles in the inks taught by Yu et al. that would contribute to the plugging of the 1.0 micron filter, thus failing the test as shown by the comparative examples in the instant application. It is respectfully urged that the inks taught by Yu et al. do not anticipate, teach or suggest the inks of the instant invention. Therefore, it is respectfully requested that this rejection be reconsidered and withdrawn.

Therefore, it is respectfully requested that the rejection under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) be reconsidered and withdrawn and that an early Notice of Allowance be issued in this application.

Respectfully submitted,



Attorney for Applicant(s)
Registration No. 26,664

Paul A. Leipold/rgd
Rochester, NY 14650
Telephone: 585-722-5023
Facsimile: 585-477-1148

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.